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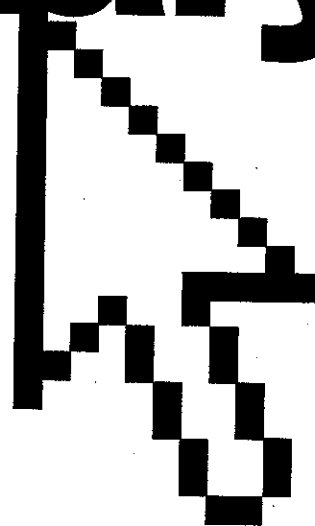Entries

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Contents

B

blanking *n.* The brief suppression of a display signal as the electron beam in a raster-scan video monitor is moved into position to display a new line. After tracing each scan line, the beam is at the right edge of the screen and must return to the left (horizontal retrace) to begin a new line. The display signal must be turned off during the time of the retrace (horizontal blanking interval) to avoid overwriting the line just displayed. Similarly, after tracing the bottom scan line, the electron beam moves to the top left corner (vertical retrace), and the beam must be turned off during the time of this retrace (vertical blanking interval) to avoid marking the screen with the retrace path.

blast *vb. See* burn (definition 1).

bleed *n.* In a printed document, any element that runs off the edge of the page or into the gutter. Bleeds are often used in books to mark important pages so they are easier to find. *See also* gutter.

blind carbon copy *n. See* bcc.

blind courtesy copy *n. See* bcc.

blind search *n.* A search for data in memory or on a storage device with no foreknowledge as to the data's order or location. *See also* linear search. *Compare* binary search, indexed search.

blink *vb.* To flash on and off. Cursors, insertion points, menu choices, warning messages, and other displays on a computer screen that are intended to catch the eye are often made to blink. The rate of blinking in a graphical user interface can sometimes be controlled by the user.

blink speed *n.* The rate at which the cursor indicating the active insertion point in a text window, or other display element, flashes on and off.

blip *n.* A small, optically sensed mark on a recording medium, such as microfilm, that is used for counting or other tracking purposes.

bloatware *n.* Software whose files occupy an extremely large amount of storage space on a user's hard disk, especially in comparison with previous versions of the same product.

block[1] *n.* **1.** Generally, a contiguous collection of similar things that are handled together as a whole. **2.** A section of random access memory temporarily assigned (allocated) to a program by the operating system. **3.** A group of statements in a program that are treated as a unit. For example, if a stated condition is true, all of the statements in the block are executed, but none are executed if the condition is false. **4.** A unit of transmitted information consisting of identification codes, data, and error-checking codes. **5.** A collection of consecutive bytes of data that are read from or written to a device (such as a disk) as a group. **6.** A rectangular grid of pixels that are handled as a unit. **7.** A segment of text that can be selected and acted upon as a whole in an application.

block[2] *vb.* **1.** To distribute a file over fixed-size blocks in storage. **2.** To prevent a signal from being transmitted. **3.** To select a segment of text, by using a mouse, menu selection, or cursor key, to be acted upon in some way, such as to format or to delete the segment.

block cipher *n.* A private key encryption method that encrypts data in blocks of a fixed size (usually 64 bits). The encrypted data block contains the same number of bits as the original. *See also* encryption, private key.

block cursor *n.* An on-screen cursor that has the same width and height in pixels as a text-mode character cell. A block cursor is used in text-based applications, especially as the mouse pointer when a mouse is installed in the system. *See also* character cell, cursor (definition 1), mouse pointer.

block device *n.* A device, such as a disk drive, that moves information in blocks—groups of bytes—rather than one character (byte) at a time. *Compare* character device.

block diagram *n.* A chart of a computer or other system in which labeled blocks represent principal components and lines and arrows between the blocks show the pathways and relationships among the components. A block diagram is an overall view of what a system consists of and how it works. To show the various components of such a system in more detail, different types of diagrams, such as flowcharts or schematics, are used. See the illustration. *Compare* bubble chart, flowchart.

block gap *n.* The unused physical space that separates blocks of data or physical records on a tape or formatted sectors on a disk. *Also called* IBG, interblock gap.

block header *n.* Information that appears at the beginning of a block of data and serves such purposes as signaling the beginning of the block, identifying the block, providing error-checking information, and describing such characteristics as the block length and the type of data contained in the block. *See also* header (definition 2).

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blocking factor *n.* **1.** The size of the chunks in which data is transferred to or from a block device such as a disk. If fewer bytes are requested, the disk drive will still read the whole block. Common blocking factors on personal computers are 128, 256, and 512 bytes. **2.** The number of file records in one disk block. If the record length for a file is 170 bytes, a block on the disk contains 512 bytes, and records do not span blocks, then the blocking factor is 3, and each block contains 510 (170 × 3) bytes of data and 2 unused bytes.

block length *n.* The length, usually in bytes, of a block of data. Block length typically ranges from 512 bytes through 4,096 kilobytes (KB), depending on the purpose for which the block is used.

block move *n.* Movement of a number of items of data together to a different location, as in reorganizing documents with a word processor or moving the contents of cell ranges in a spreadsheet. Most CPUs have instructions that easily support block moves.

block size *n.* The declared size of a block of data transferred internally within a computer, via FTP, or by modem. The size is usually chosen to make the most efficient use of all the hardware devices involved. *See also* FTP[1] (definition 1).

block structure *n.* The organization of a program into groups of statements called *blocks,* which are treated as units. Programming languages such as Ada, C, and Pascal were designed around block structure. A block is a section of code surrounded by certain delimiters (such as BEGIN and END or { and }), which signify that the intervening code can be treated as a related group of statements. For example, in C, each function is a separate block. Block structure also limits the scope of constants, data types, and variables declared in a block to that block. *See also* function (definition 2), procedure, scope (definition 1).
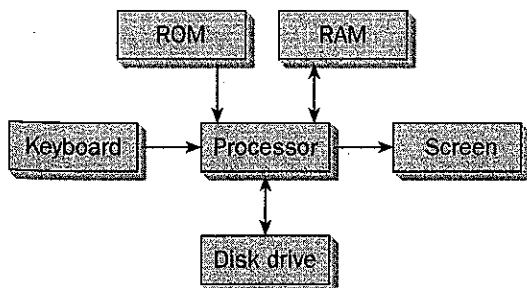
Block diagram.

**block transfer** *n.* The movement of data in discrete blocks (groups of bytes).

blow *vb. See* burn (definition 1).

blow up *vb.* To terminate abnormally, as when a program crosses some computational or storage boundary and cannot handle the situation on the other side, as in, "I tried to draw outside the window, and the graphics routines blew up." *See also* abend, abort.

blue screen *n.* A technique used in film matte special effects, in which one image is superimposed on another image. Action or objects are filmed against a blue screen. The desired background is filmed separately, and the shot containing the action or objects is superimposed onto the background. The result is one image where the blue screen disappears.

.bmp *n.* The file extension that identifies raster graphics stored in bit map file format. *See also* bit map.

BNC *n.* Acronym for bayonet-Neill-Concelman. Named for Paul Neill of Bell Labs and Carl Concelman (affiliation unknown), who developed two earlier types of coaxial connectors known as the N connector and C connector, BNC is a type of connector used to join segments of coaxial cable. When one connector is inserted into another and rotated 90 degrees, they lock. BNC connectors are often used with closed-circuit television. The letters BNC are sometimes also considered an acronym for British Naval Connector. See the illustration. *Also called* BNC connector. *See also* coaxial cable.
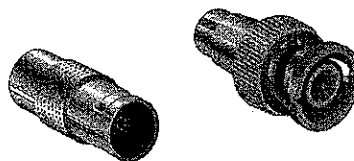
BNC connector. Male (left) and female (right) BNC connector.

BNC connector *n. See* BNC.

board *n.* An electronic module consisting of chips and other electronic components mounted on a flat, rigid substrate on which conductive paths are laid between the components. A personal computer contains a main board, called the motherboard, which usually has the microprocessor on it and slots into which other, smaller boards, called cards or adapters, can be plugged to expand the functionality of the main system, allowing connection to monitors, disk drives, or

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DA *n. See* desk accessory.

DAC \dak\ *n. See* digital-to-analog converter.

daemon *n.* A program associated with UNIX systems that performs a housekeeping or maintenance utility function without being called by the user. A daemon sits in the background and is activated only when needed, for example, to correct an error from which another program cannot recover.

daisy chain¹ *n.* A set of devices connected in series. In order to eliminate conflicting requests to use the channel (bus) to which all the devices are connected, each device is given a different priority. SCSI (Small Computer System Interface) and the newer USB (Universal Serial Bus) both support daisy chained devices. *See also* SCSI, USB.

daisy chain² *vb.* To connect a series of devices, one to another, like daisies in a chain of flowers.

daisy wheel *n.* A print element consisting of a set of formed characters with each character mounted on a separate type bar, all radiating from a center hub. *See also* daisy-wheel printer, thimble, thimble printer.

daisy-wheel printer *n.* A printer that uses a daisy-wheel type element. Daisy-wheel output is crisp and slightly imprinted, with fully formed characters resembling typewriter quality. Daisy-wheel printers were standard for high-quality printing until being superseded by laser printers. *See also* daisy wheel, thimble, thimble printer.

damping *n.* A technique for preventing overshoot (exceeding the desired limit) in the response of a circuit or device.

D-AMPS *n.* Acronym for Digital Advanced Mobile Phone Service. The digital form of the analog AMPS cellular phone service. D-AMPS, sometimes spelled DAMPS, differs from AMPS in being digital and in tripling the number of available channels by using time division multiple access (TDMA) to divide each of the 30 AMPS channels into three separate channels. *See also* AMPS, FDMA, TDMA.

DAP \dap\ *n. See* Directory Access Protocol.

dark fiber *n.* Unused capacity in fiber-optic communications.

Darlington circuit *n.* An amplifier circuit made of two transistors, often mounted in the same housing. The collectors of the two transistors are connected, and the emitter of the first is connected to the base of the second. Darlington circuits provide high-gain amplification. *Also called* Darlington pair.

Darlington pair *n. See* Darlington circuit.

DARPA \där´pə\ *n. See* Defense Advanced Research Projects Agency.

DARPANET \där´pə-net`\ *n.* Short for Defense Advanced Research Projects Agency Network. *See* ARPANET.

DAS *n. See* dual attachment station.

DASD \daz´dē\ *n.* Acronym for direct access storage device. A data storage device by which information can be accessed directly, instead of by passing sequentially through all storage areas. For example, a disk drive is a DASD, but a tape unit is not, because, with a tape unit, the data is stored as a linear sequence. *See also* direct access. *Compare* sequential access.

.dat *n.* A generic file extension for a data file.

DAT \dat\ *n. See* digital audio tape, dynamic address translation.

data *n.* Plural of the Latin *datum,* meaning an item of information. In practice, *data* is often used for the singular as well as the plural form of the noun. *Compare* information.

data acquisition *n.* The process of obtaining data from another source, usually one outside a specific system.

data aggregate *n.* A collection of data records. It usually includes a description of the placement of the data blocks and their relation to the entire set.

data attribute *n.* Structural information about data that describes its context and meaning.

**data bank** *n.* Any substantial collection of data.

illegal *adj.* Not allowed, or leading to invalid results. For example, an illegal character in a word processing program would be one that the program cannot recognize; an illegal operation might be impossible for a program or system because of built-in constraints. *Compare* invalid.

illuminance *n.* **1.** The amount of light falling on, or illuminating, a surface area. **2.** A measure of illumination (such as watts per square meter) used in reference to devices such as televisions and computer displays. *Compare* luminance.

iMac *n.* A family of Apple Macintosh computers introduced in 1998. The most visually prominent feature of the iMac is its translucent colored case that encloses both the CPU and the monitor. The first version of the iMac was blue and contained a 266 MHz PowerPC processor, a 66 MHz system bus, a hard drive, a CD-ROM drive and a 15-inch monitor. See the illustration. *See also* Macintosh.
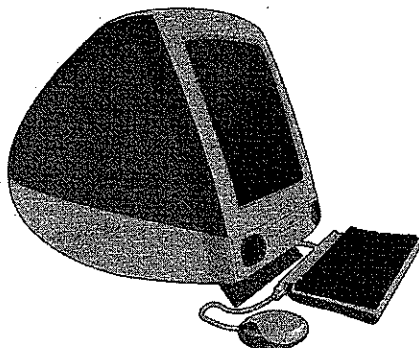
iMac.

image *n.* **1.** A stored description of a graphic picture, either as a set of brightness and color values of pixels or as a set of instructions for reproducing the picture. *See also* bit map, pixel map. **2.** A duplicate, copy, or representation of all or part of a hard or floppy disk, a section of memory or hard drive, a file, a program, or data. For example, a RAM disk can hold an image of all or part of a disk in main memory; a virtual RAM program can create an image of some portion of the computer's main memory on disk. *See also* RAM disk.

.image *n.* A file extension for a Macintosh Disk Image, a storage type often used on Apple's FTP software download sites.

image color matching *n.* The process of image output correction to match the same colors that were scanned or input.

image compression *n.* The use of a data compression technique on a graphical image. Uncompressed graphics files tend to use up large amounts of storage, so image compression is useful to conserve space. *See also* compressed file, data compression, video compression.

image editing *n.* The process of changing or modifying a bitmapped image, usually with an image editor.

image editor *n.* An application program that allows users to modify the appearance of a bitmapped image, such as a scanned photo, by using filters and other functions. Creation of new images is generally accomplished in a paint or drawing program. *See also* bitmapped graphics, filter (definition 4), paint program.

image enhancement *n.* The process of improving the quality of a graphic image, either automatically by software or manually by a user through a paint or drawing program. *See also* anti-aliasing, image processing.

image map *n.* An image that contains more than one hyperlink on a Web page. Clicking different parts of the image links the user to other resources on another part of the Web page or a different Web page or in a file. Often an image map, which can be a photograph, drawing, or a composite of several different drawings or photographs, is used as a map to the resources found on a particular Web site. Older Web browsers support only server-side image maps, which are executed on a Web server through CGI script. However, most newer Web browsers (Netscape Navigator 2.0 and higher and Internet Explorer 3.0 and higher) support client-side image maps, which are executed in a user's Web browser. *Also called* clickable maps. *See also* CGI script, hyperlink, Web page.
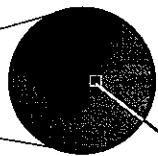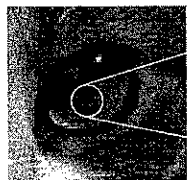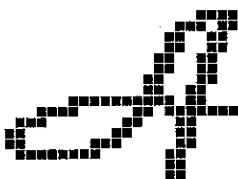
image processing *n.* The analysis, manipulation, storage, and display of graphical images from sources such as photographs, drawings, and video. Image processing spans a sequence of three steps. The input step (image capture and digitizing) converts the differences in coloring and shading in the picture into binary values that a computer can process. The processing step can include image enhancement and data compression. The output step consists of the display or printing of the processed image. Image processing

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pitch *n.* **1.** A measure, generally used with monospace fonts, that describes the number of characters that fit in a horizontal inch. *See also* characters per inch. *Compare* point[1] (definition 1). **2.** *See* screen pitch.

pixel *n.* Short for picture (**pix**) element. One spot in a rectilinear grid of thousands of such spots that are individually "painted" to form an image produced on the screen by a computer or on paper by a printer. A pixel is the smallest element that display or print hardware and software can manipulate in creating letters, numbers, or graphics. See the illustration. *Also called* pel.

Pixel. The letter A is actually made up of a pattern of pixels in a grid, as is the cat's eye.

pixel image *n.* The representation of a color graphic in a computer's memory. A pixel image is similar to a bit image, which also describes a screen graphic, but a pixel image has an added dimension, sometimes called depth, that describes the number of bits in memory assigned to each on-screen pixel.

pixel map *n.* A data structure that describes the pixel image of a graphic, including such features as color, image, resolution, dimensions, storage format, and number of bits used to describe each pixel. *See also* pixel, pixel image.

PJ/NF *n.* Acronym for projection-join normal form. *See* normal form (definition 1).

PKUNZIP *n.* A shareware utility program that uncompresses files compressed by the PKZIP shareware utility program. PKUNZIP is generally made available with PKZIP; distribution of PKUNZIP for commercial purposes is not permitted without obtaining permission from its publisher, PKware, Inc. *See also* PKZIP.

PKZIP *n.* A widely used shareware utility program for compressing files. Developed by PKware, Inc., in 1989 and available from a wide variety of sources, PKZIP can combine one or more files into a compressed output file having the extension .zip. A companion utility program, PKUNZIP, is required to uncompress the compressed files. *See also* PKUNZIP, shareware, utility program.

PLA *n.* Acronym for programmable logic array. *See* field-programmable logic array.
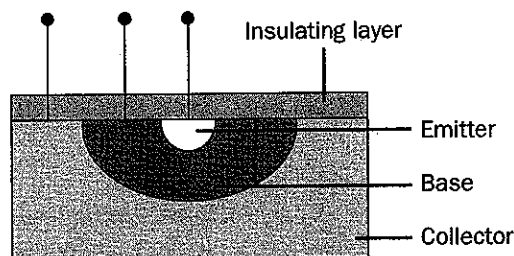
Plain Old Telephone Service *n. See* POTS.

plaintext *n.* **1.** Nonencrypted or decrypted text. *See also* decryption, encryption. **2.** A file that is stored as plain ASCII data. *Compare* ciphertext.

plain vanilla *adj.* Ordinary; the standard version of hardware or software without any enhancements. For example, a plain vanilla modem might have data transfer capability but no fax or voice features.

.plan *n.* A file in a UNIX user's home directory that is displayed when other users finger that account. Users can enter information into .plan files at their discretion to provide information in addition to that normally displayed by the finger command. *See also* finger.

planar *adj.* **1.** In computer graphics, lying within a plane. **2.** In the fabrication of semiconductor materials, maintaining the original flat surface of the silicon wafer throughout processing, while the chemicals that make up the elements that control the flow of current are diffused into (and beneath) the surface.

planar transistor *n.* A special form of transistor that is fabricated with all three elements (collector, emitter, and base) on a single layer of semiconductor material. The structure of a planar transistor permits it to dissipate relatively large amounts of heat, making this design suitable for power transistors. See the illustration.

Planar transistor.